

in Lake and Porter County will not be greater than they are today.

SCOTT DELONEY: Correct.

LISA GEORGE: That's correct.

SCOTT DELONEY: That is the commitment that's made as part of the submittal.

MARK COLEMAN: So you're saying BP's expansion will not increase any air pollution in Lake and Porter County.

SCOTT DELONEY: That's not what we're saying. What we're saying is that total emissions contributing to fine particle concentrations will not increase. What that means is, is that if we allow --

LISA GEORGE: Well, I don't know what fine particles --

SCOTT DELONEY: -- if we allow increases for fine particle emissions to occur here, we are required to find decreases that would offset those.

KARIN KIRULAS: Decreases where?

SCOTT DELONEY: Decreases either at that source, next to that source --

KARIN KIRULAS: But here in Lake County still.

SCOTT DELONEY: Correct. Within the boundaries of the defined area, which is within Lake and

Porter Counties. Correct. So that the overall net impact is zero increase. But again, I just want to make sure it's clear we're only talking in reference to fine particle precursors, and that is specifically oxides of nitrogen, sulfur dioxide and direct fine particle emissions.

KARIN KIRULAS: Well, how about the larger particles; can they increase?

SCOTT DELONEY: Those are governed under another plan that was approved when the area met that standard, so there already is a maintenance plan in place that would prohibit any growth in the course particles for this area. We went through that process back in the early nineties when the area was formally redesignated under that standard after measuring air quality that met the standard. So we've been operating under a maintenance plan that includes that commitment for quite some time.

PAT DANIEL: Are there any additional public comments for the record?

KARIN KIRULAS: I just have another question. I mean you're saying that -- that everything is -- nothing's going to change, but then you want to increase it as -- as a regular standard. I --

SCOTT DELONEY: No. We can't -- we can't

increase the standard. The federal government --

KARIN KIRULAS: Not the standard, but you want to -- you want to -- wait a minute.

SCOTT DELONEY: The federal government establishes the standard that it deems to be protective of public health. That's 15.1. We are required to comply with that standard. We've complied with that standard since 2003. What we're requesting is, is that we be recognized for complying with that standard. In approving our request, we're committing to ensure that that standard is not exceeded again in the future, and that emissions that would contribute to concentrations tied to that standard do not increase over time either.

KARIN KIRULAS: Okay. Then -- then it says -- it says here in the Post-Tribune: If EPA accepts Indiana's petition, that could loosen emissions restrictions on businesses that want to open or expand in the area. Is that right; it loosens the restrictions?

SCOTT DELONEY: No. The same restrictions apply for a maintenance area when it comes to the state having to comply with the air quality standards itself.

KARIN KIRULAS: So the Post Tribune got it all wrong?

SCOTT DELONEY: I'm not saying that. I'm not

responsible for what you're reading. What I'm saying is -- is that by approving a maintenance plan, the U.S. EPA is -- is setting a -- a rule that the state has to comply to. What that rule includes is, is that, one, we have to ensure that air quality is maintained; two, that emissions do not increase over time, and three, if there's an unexpected backsliding with regard to air quality in the area, we are required to take swift regulatory action. Now, that does not mean that the agency cannot continue to issue permitting actions to sources within this county. It's just that the agency also must ensure that none of those actions result in any net increase in emissions or would adversely affect air quality to where we would backslide in any shape or form.

And we -- if there are other topics that you wish to discuss or you want clarification on, like I said, we will remain here, but if it's okay with you, we were planning to close the hearing, and if there's anything else that you would like to discuss, we'll be here as long as you would like for us to be.

PAT DANIEL: In the absence of any further comments, these proceedings are hereby concluded. This hearing is adjourned.

* * * * *

PLEASE PRINT

Hearing Location: WY TECH

Date: 2/27/08

Name: MARK COLEMAN

Title: _____

Phone: 510-7092

Address: 9 LOCUST PLACE OPEN DUNES RD 46368

Zipcode: 46368

Representing what interest? HUMAN BEINGS

Do you wish to present oral testimony? Yes ☒ No ☐
Has written testimony been submitted? Yes ☒ No ☐
Will written testimony be submitted? Yes ☐ No ☐
Do you wish to be informed of future or final actions in this matter? Yes ☒ No ☐

PLEASE PRINT

Hearing Location: Long Tech Gang

Date: Feb 27

Name: LISA GEORGE

Title: Graphic Designer Phone: 938-5385

Address: Gang 46403

719 N. MANOCK STREET Zipcode: _____

Representing what interest? clothes, air, water

manufacturing

Do you wish to present oral testimony? Yes ☒ No ☐
Has written testimony been submitted? Yes ☐ No ☒
Will written testimony be submitted? Yes ☒ No ☐
Do you wish to be informed of future or final actions in this matter? Yes ☒ No ☐

PLEASE PRINT

Hearing Location: WY TECH

Date: 2/27/08

Name: KAREN KROEGER

Title: _____

Phone: 214-834-1851

Address: 8212 Madison

MUNSTER IN

Zipcode: 46321

Representing what interest? _____

Do you wish to present oral testimony? Yes ☒ No ☐
Has written testimony been submitted? Yes ☒ No ☐
Will written testimony be submitted? Yes ☒ No ☐
Do you wish to be informed of future or final actions in this matter? Yes ☒ No ☐

PLEASE PRINT

Hearing Location: Long Tech

Date: 2/27/2008

Name: Mark Strimble

Title: Program Leader, Air Programs Phone: 214-647-5269

Address: 801 E 86th Ave

Merrillville IN

Zipcode: _____

Representing what interest? NI Science

Do you wish to present oral testimony? Yes ☒ No ☐
Has written testimony been submitted? Yes ☐ No ☒
Will written testimony be submitted? Yes ☐ No ☒
Do you wish to be informed of future or final actions in this matter? Yes ☒ No ☐

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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PUBLIC HEARING COMMENT FORM

Title of Public Hearing: Redesignation Petition & Mount. Plan Location: Galex IVX Tech Date: 2/27/08

Name: KAREN KROCCER Organization/Company: _____

Address: 8212 Madison Ave Phone Number: 219 836 1851
MUNSTER IN 46321

If you would like to submit comments, please do so on this form, or you may attach them to this document.

2/27/08

Gentlemen,

I come before you this evening without the depth of research this topic of redesignation deserves however I've been busy with personal matters. I appreciate your willingness to hold a public hearing to hear our opinions regarding the air we breathe.

The mission of IDEM is to encourage and aid businesses and citizens in protecting and improving Indiana's environment (cite public announcement of this meeting).

I would therefore ask how permitting the emission of larger quantities of toxic soot would accomplish this mission. If EPA grants your request, is this not just what will happen?

In searching for information on soot, I found a recent article from Argonne National Laboratory APS research group that describes a new technology that allows examination of this material while it is in a nano state (way too small to see). This DOE facility warns of the health, environmental and aesthetics risks of soot.

Soot particles are created when hydrocarbons are not completely burned. (incomplete combustion) Otherwise known in commercial applications as carbon black, soot creates health problems and may contribute to thousands of premature deaths each year according to the US Environmental Protection Agency (your boss????)

Soot begins with the chemical growth of large benzene-based hydrocarbons which aggregate and merge from .5 nanometers to 20 to 50 nanometeers in diameter which then coagulate to form larger soot particles.

At ANY size, soot is problematic though it poses the greatest health risks in the range of 2.5 micrometers to 10 micrometers.

Health effects noted by Argonne from soot (particularly fine particles which can get deep into the lungs and cause serious health problems) include:

Increased respiratory symptoms such as irritation of the airways, coughing or difficulty breathing

Decreased lung function

Aggravated asthma

Development of chronic bronchitis

Irregular heartbeat

Nonfatal heart attacks and

Premature death in people with heart of lung disease

People with heart or lung diseases, children and older adults are most likely to be affected by particle pollution exposure. However, even if you are healthy, you may experience temporary symptoms from exposure to elevated levels of particle pollution.

In terms of environmental damage, Argonne notes the haze caused by soot which not affects even our pristine national parks. Additionally, it contributes to acidity in lakes and streams, negative nutrient balance in coastal waters and large river basins, depletes soil nutrients, damages sensitive forests and farm crops and affects the diversity of ecosystems. It also eats up statutes and monuments with acidity.

Does this sound like something that would encourage and aid businesses and citizens in protecting and improving Indiana's environment???

The issue before us is not the measurement of particle size however. The real question to be addressed is why we would violate the spirit of the Clean Air Act and allow any increase in the air pollution for this region in the name of economic improvement. Successful businesses (especially in the face of penalties for squandering the public resources of water, earth and air) push hard to manage waste both for the sake of their bottom line and for the preservation of that which makes commerce possible. To increase the level of pollution of soot allowed is to promote inefficiency in the face of existing technologies that allow complete combustion and postpone the day of reckoning for legacy waste clean up. Haven't we learned anything from the cost of cleaning up the US Steel channel mess? Pay me now or pay me (lots more) later. Meanwhile your children and mine will be breathing air purposefully dirty and our public health costs will rise.

Please gentlemen, listen to your public. Do the right thing. Establish and enforce laws and regulations that promote parsimony, good stewardship, health, wealth and competitiveness. Indiana can be green both in her environment and her economy.

KAREN KROCZEK

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MUNSTER IN 46321-1627

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219. 836-1851 (H)

219. 805-4881 (Cell)

"Thanks to the APS, we're able to observe pre-soot particles 10 times smaller than anything previously observed."

Randall Winans

Studying soot may minimize health hazards

Tiny soot particles, created when materials burn, create health problems and may contribute to thousands of premature deaths each year, according to the [U.S. Environmental Protection Agency](#).

Researchers from Argonne and [Brigham Young University](#) have used the [Advanced Photon Source \(APS\)](#) to see for the first time the birth and growth of the tiniest soot particles in a living flame.

This work promises to contribute to a comprehensive model of how soot forms and grows. Such a model may help to reduce the health hazards associated with soot production, to improve the efficiency and performance of industrial devices that rely on burning hydrocarbons and to devise efficient production processes that use soot, such as the industrial manufacture of carbon black.

Over the years, researchers have used a variety of techniques to study soot particles. But until now, it has been difficult or impossible to study the structure of particles in the 1 nanometer to 100 nanometer size range as they are formed. (A nanometer is about 1/50,000 the diameter of a human hair.) Yet this size range covers most of the initial formation and growth of soot particles.

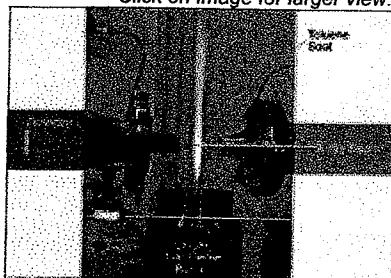
Soot originates in the incomplete combustion of hydrocarbons. Studies at other laboratories suggest that soot begins with the chemical growth of large aromatic (benzene-based) hydrocarbons to about 0.5 to 2 nanometers in diameter. This substrate or nucleus grows into an elementary soot particle about 4 nanometers in diameter and then clusters into small chains. The chains merge to produce primary particles, 20 to 50 nanometers in diameter, that coagulate to form larger soot aggregates.

This formation and growth occurs as a series of chemical and physical interactions within a flame. Thanks to the high intensity of APS X-rays, scientists have been able to study for the first time the initial distribution of soot particles as they form within the flames of such fuels as toluene and hexane.

"We've been able to observe particles between 0.8 and 15 nanometers in diameter," said Argonne chemist Randall Winans. "Thanks to the APS, we're able to observe pre-soot particles 10 times smaller than anything previously observed with a synchrotron X-ray source."

This research was funded by the [U.S. Department of Energy's Office of Basic Energy Sciences](#) and was carried out at the [Basic Energy Sciences Synchrotron Radiation Center](#) beamline at the APS.

[Click on image for larger view.](#)



Visualizing first images of soot forming in a flame may lead to advances in health and in industry.

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The size of particles is directly linked to their potential for causing health problems. Small particles less than 10 micrometers in diameter pose the greatest problems, because they can get deep into your lungs, and some may even get into your bloodstream.

Exposure to such particles can affect both your lungs and your heart. Small particles of concern include "inhalable coarse particles" (such as those found near roadways and dusty industries), which are larger than 2.5 micrometers and smaller than 10 micrometers

in diameter, and "fine particles" (such as those found in smoke and haze), which are 2.5 micrometers in diameter and smaller.

The Clean Air Act requires EPA to set air quality standards to protect both public health and the public welfare (e.g. crops and vegetation). Particle pollution affects both.

Health Effects

Particle pollution - especially fine particles - contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Numerous scientific studies have linked particle pollution exposure to a variety of problems, including:

- increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing, for example;
- decreased lung function;
- aggravated asthma;
- development of chronic bronchitis;
- irregular heartbeat;
- nonfatal heart attacks; and
- premature death in people with heart or lung disease.

People with heart or lung diseases, children and older adults are the most likely to be affected by particle pollution exposure. However, even if you are healthy, you may experience temporary symptoms from exposure to elevated levels of particle pollution. For more information about asthma, visit www.epa.gov/asthma.

Environmental Effects

Visibility reduction

Fine particles (PM_{2.5}) are the major cause of reduced visibility (haze) in parts of the United States, including many of our treasured national parks and wilderness areas. For more information about visibility, visit www.epa.gov/visibility.

Environmental damage

Particles can be carried over long distances by wind and then settle on ground or water. The effects of this settling include: making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems. More information about the effects of particle pollution and acid rain.

Aesthetic damage

Particle pollution can stain and damage stone and other materials, including culturally important objects such as statues and monuments. More information about the effects of particle pollution and acid rain.

You will need Adobe Acrobat Reader to view the Adobe PDF files on this page. See [EPA's PDF page](#) for more information about getting and using the free Acrobat Reader.

For more information on particle pollution, health and the environment, visit:

Particle Pollution and Your Health: Learn who is at risk from exposure to particle pollution, what health effects you may experience as a result of particle exposure, and simple measures you can take to reduce your risk. (PDF, 2 pp, 320 KB)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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PUBLIC HEARING COMMENT FORM

Title of Public Hearing: Particulate & Soot Redesignation Location: IVY TECH Date: 4/22/08
Name: Mark Coleman Organization/Company: HUMAN BENEFITS
Address: 9 Locust place Phone Number: 219-510-7092

If you would like to submit comments, please do so on this form, or you may attach them to this document.

It is unreasonable and illogical to designate Lake and Porter Counties in "ATTAINMENT". Just a few short weeks ago our area was designated as the worse and most unhealthy place to live by at least 2 nationally distributed magazines. This is the world's perception of our area. ^{THE STATE} THE METHODS USED to determine "attainment" are flawed. The Congress of the US has already spoken out unanimously against Indiana's flawed environmental policies. They voted 387-26 ~~to~~ for a resolution to stop a permit issued by the state to BP ~~for~~ which would allow more pollution ~~into~~ Lake Michigan.

"Studies show that states with stronger environmental policies consistently outperformed the weaker environmental states on all Economic Measures." Prof. Stephen Meyer of MIT
"States with the best environmental records also offer the best job opportunities and climate for long term economic development." Southern Studies in North Carolina -

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

PUBLIC HEARING COMMENT FORM

Title of Public Hearing: _____ Location: _____ Date: _____

Name: _____ Organization/Company: _____

Address: _____ Phone Number: _____

If you would like to submit comments, please do so on this form, or you may attach them to this document.

Therefore there ~~is~~ reason to change the designation. Is to open the door for more pollution to come.